passive, standoff review of an engine under test. It also allows a technician to "see" the areas of the engine that have caused malfunctions to occur.

Undetected and repeat problem areas often over-looked now can be troubleshot thermally.

Environmental control systems

Like the engine's uncalibrated hand or "red rag" method, environmental-control systems (ECS) can be scanned easily and effectively for hot bleed-air leaks in a matter of minutes. Many AMEs know the headaches



The same valve after tightening the bolts.

of looking for these type problems. With infrared thermography, small leaks can be pin-pointed, removing the guess factor that leads to the removal and replacement of non-failed components.

Safety

IRT gives the maintenance department several new options to look at unresolved discrepancies. This equipment primarily incorporates new safety measures never available before.

Now we can "see" potentially catastrophic electrical-component failures. We also can do away with hand checks and engine analysis done too close to an operating engine. The ability to discuss, analyze, and record the test results is exclusive to this technology only. NATEC 3.7 Engineering Technical Services at NAS North Island continues to explore improvements in aviation-maintenance technology and safety.

Mr. Figg is a technical representative at NATEC North Island.

Aircraft Command Date F-14A VF-211 10/01/2003 Aircraft sustained damage on arrested landing.

FA-18E VFA-115 10/09/2003 Port main-landing gear forward door departed aircraft in flight.

AV-8B VMA-223 10/19/2003 Aircraft starboard wing damaged after bird strike.

F-14B VF-143 10/24/2003 Port engine ingested ACLS-beacon antenna during in-flight refueling.

FA-18E VFA-115 11/08/2003 Port main-landing gear forward door departed aircraft in flight.

F-14D VF-213 12/05/2003 Aircraft canopy jettisoned while on deck.

F-14B VF-143 12/07/2003 During aircraft refueling, basket separated from fueling aircraft and FODed an engine.



Printed as a supplement to Mech from Naval Safety Center Data Dr. Michael S. Borowsky For questions or comments, call Dan Steber (757) 444-3520 Ext. 7227 (DSN 564)



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